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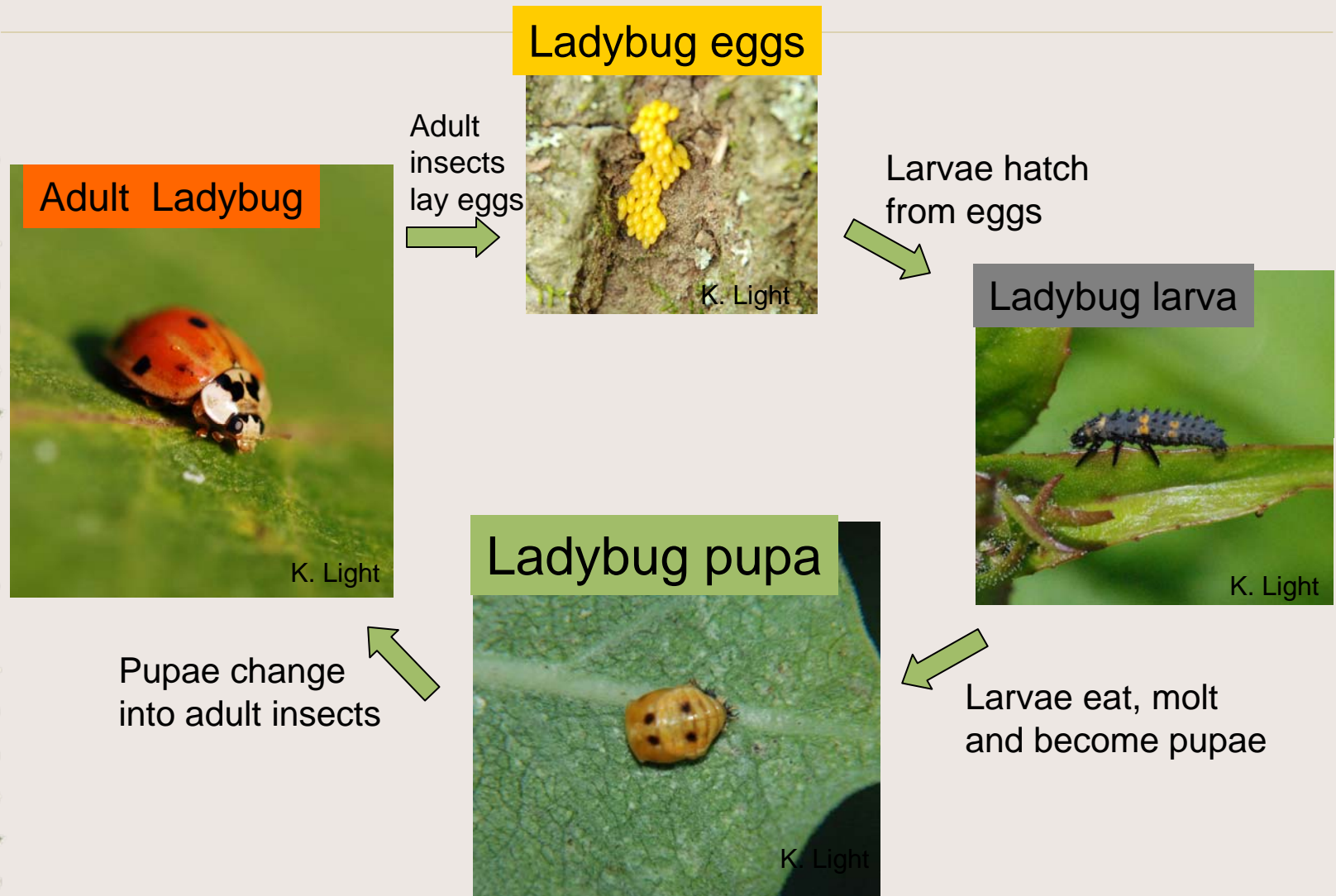
Metamorphosis - Insects

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Complete Metamorphosis



A Ladybug Larva



- Ladybugs go through complete metamorphosis. Their larvae are big eaters! They love to eat aphids, making them a great insect to have in the garden! This larva is chomping on a yellow aphid.

A Ladybug Pupa

- The larva sheds its skin and becomes a pupa. The fuzzy larval skin is barely visible on the right side. This is the resting and changing phase, soon the adult will come out to eat even more aphids!



An Adult Ladybug

- This adult ladybug (or sometimes called “ladybird” beetle) is chowing down on an aphid. A ladybug can eat over 300 aphids in its short lifetime!



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Incomplete metamorphosis

- Some insects such as grasshoppers, true bugs, dragonflies, cicadas and roaches go through incomplete metamorphosis. A nymph hatches from the egg instead of a larva. The nymphs look much like a wingless adult. The nymphs go through several (often 5) “instars”, periods of growth and molting, before finally growing wings and becoming an adult.



Bug nymphs and egg shells



Spittlebug nymph

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Adult insect

- In the final molting, the insect becomes an adult.

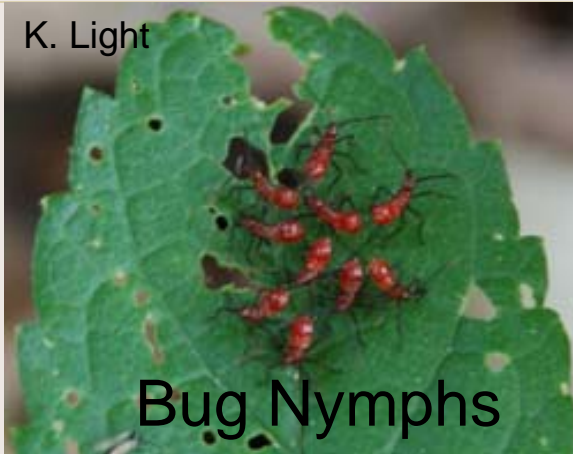


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Adult Spittlebug emerging
from foam nest

Other insects that go through incomplete metamorphosis

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Bug Nymphs

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Dragonfly

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Florida Leaf-footed Bug



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Cicada emerging from Nymph shell



Field Cricket

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Larvae and Nymphs to adults

Antlion larva



Cicada nymph



Dragonfly Nymph



Follow-up Questions

- 1. What is another name for a ladybug?
- 2. How many aphids can a ladybug eat in its lifetime?
- 3. What is the term for the stage after the egg for insects that go through incomplete metamorphosis?
- 4. What are some differences between a nymph and an adult insect?
- 5. What is an “instar”?

End of Presentation

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